STATE OF CALIFORNIA
Department of General Services - Office of Procurement
PURCHASE ORDER

Form GSOP 1-PIN (04/98)

Purchase Order No.	Rev.	Date
62241		6/30/2008

Supplier No.	Solicitation No.	Delivery Date	FOB Point	Invoice Terms
165197	57067	240 Days ARO	Destination	

RIVERVIEW INT'L TRUCKS INC
PO BOX 716
W SACRAMENTO, CA 95691

Phone: 916-371-3110

Ship To: DEPT OF WATER RESOURCE
CONTACT JIM PEARSON
916-6539051

Charge To: DEPT. OF WATER RESOURCE
P.O. BOX 942836
SACRAMENTO, CA 94236-001

Agency Billing	Agency Purchase Estimate	Purchase Estimate	Revision
81000	6000016068	67021	0

Agency Contact	Phone	Date Received
BILL MAHON, ABMA	916-653-6167	

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
1	1	EA	1096-000-0380-8	TRUCK CAB & CHASSIS WITH WATER TANK Truck, 4000 Gallon Water, Cab & Chassis, 3 Axle 4 wheel drive in accordance with Technical Specifications and Administrative requirements of (25) twenty five pages #18R1-2007-01, dated August 2008. Brand: INTERNATIONAL 7600 Model: W/DIAMOND STEEL WATER TRUCK	192,867.9300	192,867.93

THE GENERAL PROVISIONS FOR NON-IT COMMODITIES ARE HEREBY INCORPORATED BY REFERENCE. THESE GENERAL PROVISIONS CAN BE OBTAINED BY PHONING (916) 375-4400 OR BY ACCESSING OUR WEBSITE AT:

www.documents.dgs.ca.gov/pd/modellang/GPnonIT0407.pdf

THE FOLLOWING INFORMATION IS PROVIDED FOR AGENCY USE ONLY:

PRIME CONTRACTOR: NS

This Purchase order has been registered into the state contact and procurement registration system (https://www.scprs.dgs.ca.gov/). The registration number is:38600908334894.

Total Value: 192,867.93

FOB DESTINATION:
For the purpose of this orde, only F.O.B. Destination will be accepted.

Sales and/or use tax to be extra unless noted above

Buyer	Phone	BOC Number
GUS QUINTERO	916-375-4499	

STATE OF CALIFORNIA

Department of General Services - Office of Procurement

PURCHASE ORDER CONTINUATION

Form GSOP 2-PIN (04/98)

Purchase Order No.	*Revision*	*Date*	*Supplier No.*	*Supplier Name*
62241		6/30/2008	165197	RIVERVIEW INT'L TRUCKS INC

Item No.	*Quantity*	*Unit*	*Commodity Code*	*Description*	*Unit Price*	*Extension*

This purchase order is being awarded on September 26, 2008 pursuant to Government Code Section 13332.17. Any encumbrances made pursuant to this purchase order shall be construed to have been made on the last day of the preceding fiscal year.

CHANGE ORDERS:

This Purchase Order may be amended, modified or terminated at any time by mutual agreement of the parties in writing. Change orders amending, modifying or terminating the Purchase Order, including any modifications of the compensation payable, may be issued only by the State Procurement Officer. All such change orders shall be in writing and issued only upon written concurrence of the supplier. Termination, as that term is used in this section, does not include termination for default of the supplier.

State of California
Department of Water Resources
Division of Operations and Maintenance
Specification 18R1-2007-01
August 2008

TECHNICAL SPECIFICATIONS

It is the intent of this specification to describe the minimum requirements for a three-axle, 4 wheel drive, diesel powered truck chassis with automatic transmission and conventional cab. The chassis shall be suitable for mounting a 4,000-gallon capacity tank and spray equipment. The unit shall be utilized for dust control and fire suppression during levee maintenance within DWR and the Division of Flood Management.

1. CAPACITY:

1.1 The manufacturer's Gross Vehicle Weight Rating (GVWR) shall not be less than 66,000 pounds. The manufacturer's Gross Combined Weight Rating (GCWR) shall not be less than 80,000 pounds. The curb weight of the cab and chassis, complete with full capacities of fuel, water and lubricants, including the standard and specified equipment shall not be less than 16,000 pounds nor more than 22,000 pounds.

2. WHEELBASE:

2.1 The wheelbase shall be approximately 210 inches (+ 6 inches) providing 20 feet (minimum) between the centerline of the front axle and the centerline of the rear most tandem axle as defined in the California Vehicle Code section 35551. In addition, there shall be a clear CA (back of the cab to the centerline of the rear tandem axles) suitable for mounting the 4,000 gallon water tank and appurtenant equipment.

NOTE: Splicing or lengthening the original frame will not be acceptable. The engine placement shall be such that an in-frame engine overhaul can be preformed without disturbing the engine, transmission, or cab mounts. This wheelbase layout is assuming non muffler/catalyst intrusion.

3. ENGINE:

3.1 The engine shall be an electronic controlled, diesel fueled, 6 cylinder, in line, four cycle design, with a minimum displacement of 530 cubic inches. The engine shall be turbocharged and develop a minimum of 380 gross brake horsepower at not less than 2,100 RPM and a minimum gross torque of 1400 ft. lbs. per SAE J1995. The engine shall have a minimum operating RPM range (RPM at peak torque to the RPM of the horsepower as specified herein) of not less than 800 RPM.

3.2 The following options or accessories shall be installed on the engine: California emissions certification. The engine shall also meet all current Federal and State emissions requirements.

3.3 Replaceable, spin on, combination-type (full flow and bypass) oil filter. Make and model as recommended by the engine manufacturer.

3.4 A diesel engine brake shall be supplied and installed (Ref: Jacobs or comparable). The brake used shall be approved by the engine manufacturer and the model as recommended by the brake manufacturer. There shall be an ON/OFF toggle switch and a two (2) or three (3) position toggle switch to control the number of cylinders actuated by the brake. Both switches shall be appropriately labeled and dash mounted in the cab within easy reach of the operator.

3.5 An air cleaner system of the correct capacity recommended by the filter manufacturer to match the demand of the engine and air compressor. The air cleaner system shall have an air restriction gauge, mounted to be easily viewable during pre-op inspections (i.e. – may be dash mounted (preferred), or mounted under the hood). The unit shall be redlined for servicing or replacement as recommended by the engine manufacturer, must hold and maintain the highest reading, and be re-settable (Ref. Filter Minder Air Restriction Gauge Model No. 3781 325, or comparable). The air cleaner connections shall be dustproof and waterproof, either tubing or hose, mounted to withstand abrasion, wear, and vibration. The top of the air cleaner assembly shall not extend above the top of the hood. The air cleaner system shall be one of the following combinations:

3.1.1. Two (2) dry type replaceable paper elements consisting of an outer primary filter and an inner safety element.

3.1.2. A centrifuging action pre-cleaner that removes coarse dust and moisture with a self cleaning dust and water evacuator and a replaceable paper element filter.

3.1.3. A centrifuging action pre-cleaner that removes coarse dust and moisture with a self cleaning dust and water evacuator and two (2) dry type replaceable paper elements consisting of an outer primary filter and an inner safety element.

3.6 An electric thermostatic controlled radiator fan with an air actuated clutch for engaging and disengaging the fan. The fan clutch shall be complete with a manual override mounted inside the cab. The switch for the fan clutch override shall be appropriately labeled.

3.7 An hour meter, dash mounted to record the engine running time (reference Hobbs model 85006 solid state or equivalent). An hour meter included as a standard feature of the instrument cluster meets this requirement.

3.8 Electric key shutoff.

3.9 An oil pressure gauge shall be mounted in the dash. The gauge shall be complete with a warning light and audible alarm for low oil pressure.

3.10 Variable speed governor to maintain a constant operator set engine RPM while the PTO is in operation under varying loads. Electronic PTO throttle controls shall be supplied. There shall be an ON/OFF switch and a SET switch. The controls shall allow the operator to vary the setting of the engine RPM from idle to 1600 RPM. Controls shall be dash mounted and appropriately labeled.

3.11 An adapter for a front mounted PTO (connected directly to the engine crankshaft) shall be supplied and installed. Adequate clearance for a 2-inch driveline under the fan, and under the radiator shall be provided for the PTO.

NOTE: All filters, etc. shall be located in a convenient location for serviceability and shall not interfere with other components.

4. TRANSMISSION:

4.1 The transmission shall be an Allison 4500_RDS On/Off Highway, 6 speed automatic transmission or comparable. The first gear shall have a ratio of 470 to 1 and capable of a speed between 3 and 5 mph locked in 1st gear. The transmission shall be complete with torque converter, automatic lock-up clutch, auxiliary oil cooler, and PTO provisions.

4.2 The electronic controls for the transmission (shift points) shall be calibrated to provide the maximum performance from the engine. The operator shall be able to lock and hold the transmission in any gear

4.3 The cooling system for the transmission shall incorporate a water/oil heat exchanger to maintain oil at a suitable working temperature as recommended by the transmission manufacture. A transmission oil temperature gauge kit shall be supplied and installed in the dash. The gauge shall be lined at the maximum operating temperature as recommended by the manufacture and shall be back lighted in the same manner as the other dash gauges. The oil temperature sensor shall be located to monitor the oil at its maximum temperature in the system.

4.4 Transmission controls and mounting shall be in accordance with the transmission manufacture's specifications and recommendations. The transmission shall have a shift pattern of 1,2,3,4,5,D, N, and R (Note: Reverse shall be located toward the front of the shifter). The transmission control shall be lever type shifter, located to the right of the driver. Operation of the lever shall be forward and back (not side to side) and shall be easily accessible to the driver. The shift lever shall be lighted for nighttime operation.

4.5 There shall be adequate clearance to direct mount a PTO on the transmission.

4.6 The State of California and Allison shall determine if the torque converter and axle ratio are acceptable.

4.7 The transmission shift pattern shall be set to provide progressive downshifting when the engine brake is activated.

5. FRAME:

5.1 The frame shall be full "C" channel construction with integral front frame extensions. The RBM (Resistance Bending Moment) of the frame shall not be less than 2,400,000 in. lbs. per rail. The rails shall be fabricated from steel with a minimum yield strength of 110,000 PSI. Each rail shall be full length with no splicing or added extensions.

5.2 The integral front frame rail extensions shall extend not less than 18 inches beyond the radiator grille. Both rails of the frame extension shall have a slot, centered between the frame flanges, for routing hydraulic hoses. The slot shall be 5 inches long by 3 inches high, and centered eighteen (18) inches from the forward face of the PTO adapter. The slots shall be finished smooth.

5.3 If required, frame rails may be notched or cut out, by the factory, to accept the engine. The RBM at the notch or cut out shall not be less than 1,500,000 in. lbs. per rail.

5.4 The right frame rail behind the cab shall not have components or accessories mounted to the outside of the rail. This will allow a clear space to mount pump and plumbing equipment.

5.5 The frame height, as measured from the top of the frame rail to level ground, at a location directly behind the cab, shall not exceed 50 inches.

5.6 Step type frames are not acceptable.

5.7 If a frame rail requires reinforcing, other than an additional full "C" channel (the reinforcement shall be full length, from the rear of the front spring hanger to the end of the frame), the reinforcement design shall be approved by State of California.

5.8 The end of the frame rails shall be square and not have ramps.

5.9 No components, behind the cab, shall extend above the frame rails.

5.10 Flame cutting shall not be allowed on a heat treated frame.

6. COOLING SYSTEM:

6.1 The unit shall be equipped with a heavy duty radiator and de-aerator system. The radiator shall adequately cool the engine when operating at sea level and 120° F., or 7,000 feet elevation and 100o F., up 6% grades with a GCWR of 80,000 pounds. The cooling system shall be filled with a suitable anti-freeze rated for -40o F operation, and shall be compatible with water. A cooling system conditioner shall be installed to filter the coolant and control corrosive action. All water hoses shall be high temperature rated, reinforced silicone rubber hoses (preferred); or, Ethylene Propylene Diene Monomer (EPDM) hoses. All hose clamps shall be rated for silicone use (or as specified by the hose manufacturer for EPDM use), and where sizes available, shall be constant torque type clamps. All plumbing in the cooling system shall be fabricated from corrosion resistant material, and shall be suitable for the use intended. The radiator shall have a low coolant level warning light visible to the operator and an audible alarm in case the cooling liquid becomes low (Reference Brand: Robertshaw Mini Tek, Model 813 N, or comparable).

6.2 If a driveline Retarder is furnished, the cooling system shall be upgraded to allow full use of the Retarder while operating at an ambient temperature of 100° F, down a 12% grade, at the full rated GVWR.

7. EXHAUST:

7.1 The exhaust muffler shall be mounted in a horizontal position between or beside the frame rails. The exhaust stack shall be mounted in a vertical position, behind or beside the passenger side of the cab, and shall be provided with a safety heat shield around the full length of the exposed pipe(s). A "turned back" style exhaust is required in order to help prevent rain and snow from entering the exhaust system. The exhaust shall be directed above and away from the cab and any accessories.

8. FRONT AXLE:

8.1 The front axle springs and brakes shall have a manufacturer's minimum weight rating of 20,000 lbs. The drums shall be steel, outboard mounted, with ten (10) studs per wheel on a bolt circle diameter of 11.25 inches.

8.2 The bearings shall be lubricated by an oil bath, and the hubs shall have Stemco type oil seals with a transparent cap to view the oil level. The lubricant shall be the synthetic type (Ref. Emgard 50W, or comparable), with an extended change interval. The hubs shall be labeled to indicate they have been filled with a synthetic lubricant.

9. REAR TANDEM AXLES:

9.1 The rear axles shall be single reduction tandem axles, both driving, with a manufacturer's minimum GAWR of 46,000 pounds for the axles, springs, brakes, wheels, and tires. The gear ratio supplied shall provide a maximum road speed of not less than 55 MPH nor more than 65 MPH at the governed RPM. The forward axle unit shall have an inter-axle differential lock for off-highway operation. The rear axle shall have an operator controlled differential lock.

9.2 Both rear axles shall be equipped with electronic traction control. The electronic traction control shall monitor wheel speed and work in conjunction with the vehicle Anti-Lock Brake System (ABS) to limit traction loss during acceleration.

9.3 The hubs shall have Stemco type oil seals. The drums shall be steel, outboard mounted, with ten (10) studs per wheel on a bolt circle diameter of 11.25 inches.

9.4 The rear axle differentials shall be filled with a synthetic type gear lubricant (Ref. Emgard 75W-90, or comparable), with an extended change interval. The fill location(s) shall be labeled to indicate the differentials have been filled with a synthetic lubricant.

10. BRAKES:

10.1 Full air brakes shall be supplied with "S" cam actuation on all axles to match the axle load rating. The brakes shall be self adjusting such as Haldex's Self Adjusting Slack Adjustor or comparable. The brake system shall be in compliance with Federal Motor Vehicle Safety Standards No. 121 (FMVSS). The following shall be supplied and installed:

10.2 A minimum 12 CFM capacity air compressor. Air for the compressor shall be filtered air taken from the air cleaner or air cleaner induction system.

10.3 A Bendix Model AD IP or comparable air drier.

10.4 One (1) or more air accessory outlets with pressure protection valves. Outlet shall be mounted and capped on the secondary air tank.

10.5 Any air accessories shall be fed through a pressure protection valve. Pressure protection valve shall be mounted on the tank.

10.6 A parking brake, spring activated. On tandem axles, there shall be spring chambers on both axles. All spring chambers shall be anti-compounding.

10.7 An air brake emergency stopping system, spring activated and in compliance with FMVSS No. 121.

10.8 Dust Shields or backing plates, on all brakes.

10.9 ABS (Anti-lock Brake System). A minimum 4-channel system shall be supplied. System shall be factory installed.

11. FRONT SUSPENSION:

11.1 The front suspension shall be leaf springs and shall have a rated capacity of not less than the GAWR of the front axle. The front suspension shall be complete with heavy duty shock absorbers.

12. REAR SUSPENSION:

12.1 The rear suspension shall be leaf springs and equalizing beam type and have a total rated capacity of not less than the combined GAWR of the rear axles. The equalizing beams shall be 54 inches in length. (Ref. Hendrickson RT 460 or comparable).

13. STEERING GEAR:

13.1 Steering shall be an integral valve hydraulic powered type steering with the manufacturer's highest rated steering box and power assist ram or highest rated dual steering boxes.

13.2 The steering wheel shall have a tilt feature.

14. WHEELS:

14.1 Ten (10) steel disc type wheels shall be furnished. The wheels shall be drop center tubeless type, designed for use with either radial or bias type tires. All wheels supplied shall have ten (10) stud holes per wheel with a bolt circle diameter of 11.25 inches (285.75mm), and a center bore diameter of 8.72 inches. Wheel widths shall be as recommended by The Tire and Rim Association Inc. and the tire manufacturer. All wheels shall be hub piloted, with a minimum of two (2) hand holes. Dual wheels shall be mounted using stud type dual mounting cap nuts. All wheels supplied on the order shall be of the same make and model (front and rear wheels may differ in model).

14.2 The use of spacers between the wheels or the wheel and the drum are unacceptable.

14.3 All wheels shall be painted white in color.

14.4 Tire chain clearance shall be provided for dual tire chains with triple side chains. Clearance shall conform to the requirements of SAE J 683.

15. TIRES:

15.1 Ten (10) steel belted radial tubeless type tires, completely mounted and balanced on the wheels, shall be furnished. The front tires shall be size 425/65R22.5 with a minimum load rating L. The rear tires shall be size 11R/22.5, with a 14 ply rating, minimum Load Range 'G'. All tires shall have a traction tread pattern.

Note: Tire sizes may vary, upon prior approval by the State, to insure proper front/rear final drive mismatch tolerances.

16. CAB:

16.1 The cab shall be the conventional cab design, enclosed with approved safety glass windshield, rear window, and roll down glass in the side doors. The cab shall be rubber mounted, and have a front tilting hood and fenders over a stationary grille.

16.2 A wire mesh bug screen, constructed from corrosion resistant metal, shall be installed behind the grill.

16.3 If a 1½ inch diameter object can pass through any part of the grill, a stone and gravel guard shall be furnished and installed directly behind the grill.

Note: A bug screen will not be substituted for a stone and gravel guard.

16.4 The following items, supplementing if necessary those items already cataloged as standard cab equipment, shall be furnished and installed:

16.4.1 Dual visors.

16.4.2 Multi speed cab heater and windshield defroster.

16.4.3 Right and left outside rearview mirrors, not less than 6 inches by 16 inches in size, electrically heated, mounted in a stainless steel back or powder coated mirror brackets with black mirror heads. (Tef. Re-Track Mirror Model 1160H or comparable). Chrome finished brackets are not acceptable.

16.4.4 Dual windshield wipers with an intermittent feature.

16.4.5 Dual windshield washers.

16.4.6 Dual arm rests.

16.4.7 Full instrumentation, including but not limited to the following: speedometer, tachometer, coolant temperature, transmission temperature gauge, primary and secondary air pressure, oil pressure, fuel level, pyrometer, and voltmeter. Warning lights shall not substitute for readable indicating instruments.

16.4.8 The tachometer supplied shall be the electrical type, powered by the truck's electrical system. The tachometer shall be redlined at the maximum engine speed as recommended by the engine manufacture.

16.4.9 Factory, cab mounted (if available) Air horn(s).

16.4.10 Factory air conditioner, with fresh air ventilators, combination fresh air and recirculation system, integral with the heater, shall be furnished.

16.4.11 Dome light. Light shall be activated by opening the driver door, the passenger door, and by a switch in the cab.

16.4.12 Steps and grab handles to safely enter and exit the cab on both sides.

16.4.13 Floor Mats, headliner and full cab insulation. Bare metal or fiber board will not be considered as insulation.

16.4.14 Driver's air controlled bucket seat (Ref. Bostrom, Model Air 915 or National Cush N Aire, Exec Model 195, or comparable) with high back to support head and shoulders, and a right (towards center of cab) hinged arm rest.

16.4.15 Passenger's seat non-air to match driver's seat. The seat shall have a high back to support the shoulders and head, (Ref. Bostrom, Model 900 Companion or comparable).

16.4.16 Seat belt installed for the driver and passenger. Both lap and shoulder belts shall be installed.

16.4.17 Visibility window in the lower forward section of the right door (Maybe Dealer Installed).

16.4.18 Cab interior shall be a brown or grey color, or as deemed acceptable by the State.

16.4.19 Locking cab, with all locks keyed alike, and three (3) complete sets of keys per unit.

16.4.20 Standard OEM AM/FM/WB (weather band) radio, complete with speakers and antenna.

16.4.21 Halogen headlamps.

16.4.22 Power port (preferred) or cigar lighter.

16.4.23 A downward-viewing convex mirror, located above the passenger (right) door window.

NOTE: All gauges and controls shall be marked/identified for function and use in English. The markings shall be explicit, legible, and permanent. International symbols may be used to supplement (not in lieu of or predominate over) the above. Any precautionary signs shall be similarly marked. All gauges shall be panel mounted, consistent in size, color, scheme, pointer design, and label style and size. All gauges and instrumentation shall be adequately illuminated for nighttime operation, with an infinitely variable brightness control from full bright to off. Gauges mounted below the dash are unacceptable. All gauges shall be located to be easily read by the operator.

17. FUEL CAPACITY:

17.1 The total fuel capacity shall be not less than 100 gallons. The fuel system shall consist of two (2) metal safety type tanks, mounted on each side of the chassis, under the cab. The fuel tanks shall have not less than 15 inches clearance from the bottom of the tanks to the ground. Each tank shall have a filler opening. Each tank shall have fuel supply and return lines. All supply and return lines shall be complete with their own shut-off valves. In general, the fuel system shall be designed such that fuel may be drawn and returned from either tank or from both tanks. Each tank shall be equipped with a bottom drain.

18. ELECTRICAL EQUIPMENT:

18.1 Minimum electrical equipment shall comply with all Federal Motor Vehicle Safety Standards and State of California Department of Motor Vehicle regulations. The tail, stop, and directional signal lamps may be in combination, and the wires to these lamps shall be in a loom or conduit. A minimum 130-amp alternator with a matching regulator shall be furnished. The battery system rating shall be not less than 1,825 CCA (cold cranking amps) at 0o F. and a reserve capacity of not less than 425 minutes at 25 amps and 80o F. Ratings are as established by BCI (Battery Council International) and SAE. The electrical operational system shall be 12 volts. Side terminal batteries are not acceptable.

18.2 Re-settable circuit breakers shall be supplied in lieu of fuses where available.

19. BODY AND HARDWARE:

19.1 TANK:

19.1.1 Capacity – 4,000 gallons (fill capacity).

19.1.2 Shape – elliptical around longitudinal axis.

19.1.3 Approximate Outside Dimensions – 95" X 63" X 196" L.

19.1.4 Material – T-304 Stainless Steel A.S.T.M. 304-2B

19.1.5 Shell – 7 gauge S.S

19.1.6 Heads – 7 gauge S.S, roll flange and semi-dished, welded 100% inside and out.

19.1.7 Surge baffles – Three (3) each of 7-gauge S.S, roll flanged, semi-dished baffles equally spaced. Baffle to have a 19" flanged crawl hole, top and bottoms Equalizer cutouts.

19.1.8 Manhole – Stainless Steel 20" diameter manhole with cam latch, located forward of the center baffle for easy access.

19.1.9 Ladder – Stainless Steel ¾" pipe ladder with non-skid steps from bottom rear of tank assembly, up rear of tank, with two top tank handholds.

19.1.10 Catwalk – Stainless Steel Non–skid path from ladder to fill dome and hydraulic fill cap.

19.1.11 Water level gauge – Tube type, with bottom shut off valve, two each, one located on rear head and one located on front head of tank.

19.1.12 Tank frame – Two tank-end saddles of ½"x4"x48" steel, two tank end bolster of ½"x 8"x48" steel, two full length 7-gauge x 12" steel bearing plates, skip-welded 50% longitudinally to bottom of tank and two U-formed channel tank sills of 3/16" steel plate welded 50% to the bearing plates. As an alternative design, full length 5/16" carbon steel Z-rails and five (5) padded box bolster and wing assemblies maybe supplied. A bolster shall be located under each end of the tank and one underneath each baffle for a total of five (5).

19.1.13 Bridge Law Over-Flow Riser – Provide an overflow riser inside the tank plumbed through the rear tank head with a valve designed to release water in excess of "bridge law" requirements of the California Vehicle Code (CVC) section 35551. The riser shall extend to a height which will allow the release of enough water to bring the load upon each axle within the legal limit of the referenced CVC.

19.2 WATER PUMP:

19.2.1 Centrifugal pump rated an 850 GPM and 80-PSI static, (reference "BERLELEY" model B3ZRM, 4"x3" CCW Rotation).

19.2.2 Pump to be left side mounted, forward of rear axles on rugged framework attached to left tank sill.

19.3 TANK MOUNTING:

19.3.1 Shocks pads – Six ½" x 2 1/2" x 24" neoprene pads attached to tank sills (three per sill) between tank sills and truck frame.

19.3.2 Tank center of gravity to be 30" forward of rear axle.

19.3.3 Rear mounts – 4" stainless steel channels (1 per side) welded to sills and bolted to frame rails with two each 5/8" grade 5 machine bolts.

19.3.4 Front mounts – Spring loaded telescopic mounts (two each side) welded to tank sills and bolted to truck frame rails with two each 5/8" grade 5 machine bolts.

19.3.5 As an alternative, the mounting system can consist of full length shock pads and six steel spring loaded mounting brackets in lieu of the above tank mounting system.

19.4 HYDRAULIC WATER PUMP DRIVE SYSTEM:

19.4.1 System parameters – Hydraulic system to provide the maximum water pump speed of 2,500 RPM at not less than 1,250 RPM, truck engine speed under maximum water pump load condition. At truck engine speed of 1,250 RPM, the hydraulic pump will be capable of producing not less than 22 GPM oil flow at 4,000-PSI pressure. Water system will produce maximum water pump output at engine speeds of 1,200 to 2,400 RPM.

19.4.2 Hydraulic motor – 1.285 CID, 4,500 psi gear motor, direct coupled to water pump with 13 tooth splined two bolt SAE-B hydraulic motor adapter. As an alternative, a motor rated at 1.4 CID and a system pressure of 4,000 psi may be supplied in lieu of the above motor when paired with the alternative pump listed below.

19.4.3 Hydraulic pump – 4.33-CID pressure and flow compensated load-sensing variable displacement 4,500-PSI axial piston pump, two (2) bolt SAE-C foot mounted between the truck front frame extension. The Pump is to be connected to the truck engine crankshaft PTO adapter with 2" x .083" wall tubular drive shaft with U-joins at both ends. The drive shaft shall pass below the truck radiator and be shrouded with a safety guard. As an alternative, a pump rated at 5.3 CID and a system pressure of 4,000 psi may be supplied in lieu of the above pump if it is paired with the alternative 1.4 CID motor.

19.4.4 Hydraulic throttle – Cab mounted dial knob to control electronic signal to variable displacement proportional control valve in hydraulic pressure line to provide full range speed control) 0 to 2,500 RPM).

19.4.5 Hydraulic governor – ¾" needle valve with lockable micrometer adjustment, in hydraulic pressure line, to provide governed control of maximum water pump speed at 2,500 RPM.

19.4.6 Hydraulic oil reservoir – Forty gallon capacity, plus 10% outage, 7-gauge stainless reservoir tank to inside bottom of front compartment of water tank. Reservoir to have 1½" suction and 1" return pipe fittings protruding through the bottom of the water tank; 2" 0 fill pipe through the top of the water tank; 2" lockable pressure and vacuum relieving fill cap; 1" 0 oil level sight glass on out side of tan front compartment; individual shut-off valves on suction and return sides of reservoir. All fittings welded and pressure tested. Water in truck tank shall provide heat dissipation from hydraulic oil reservoir.
As an alternative, the Hydraulic oil reservoir can be supplied external to the tank, but will require the addition of a water to oil heat exchanger to dissipate the excess heat of the hydraulic system under the service operating temperatures. The tank shall meet the requirement above except that the 1 ½" suction line, 1" return line, and 2" fill pipe will not be required to protrude through the bottom and top of the main water tank. The oil level site glass shall be easily viewable by the driver while standing next to the truck.

19.4.7 Suction plumbing – 1½" SAE 100R1 suction hose and fittings from reservoir outlet to hydraulic pump inlet port.

19.4.8 Pressure plumbing – 3/4" SAE 100R12 pressure hose and fittings from hydraulic pump pressure port to hydraulic throttle inlet port. ¾" SAE 100R12 pressure hose and fittings from hydraulic throttle outlet port to hydraulic motor inlet port.

19.4.9 Compensator plumbing – ¼" SAE-100R1 pressure hose and fittings from ¾" hydraulic pressure line to hydraulic pump compensator signal port.

19.4.10 Case drain plumbing – ½" SAE 100R1 hose and fittings from hydraulic pump case drain pot to hydraulic oil filter inlet port.

19.4.11 Return plumbing – 1" SAE 100R1 hose fittings from hydraulic motor outlet port to hydraulic oil reservoir.

19.4.12 Hydraulic oil filter – 50 GPM, 10 micron, 200 PSI rated spin-on, throw–away cartridge return line oil filter with 25 PSI internal bypass valve, mounted in hydraulic return plumbing.

19.4.13 Hydraulic oil – Forty gallon of ISO grade #46.

19.5 WATER PUMPING:

19.5.1 Piping – Schedule 40 stainless pipe with welded joint and bolt joints, rubber U-channel gasket flex couplings and low point drains (hoses and pipe fittings not acceptable).

19.5.2 Mounting – All plumbing shall be above truck frame and mounted to tank assembly.

19.5.3 Suction plumbing – 4" inch pipe with anti-vortex baffles from tank bottom, 6" diameter suction sump.

19.5.4 Pressure plumbing – 3" and 2" pipe from pump to manifold and from manifold to sprays.

19.5.5 A 1½" pipe from pump manifold to hose reel.

19.5.6 Relief valve – Pressure plumbing to be equipped with one 21/2" x 5" pneumatic operated adjustable water pressure control valve with bypass to water tank.

19.6 WATER SPRAYS:

19.6.1 Operation – Normally open, spring to hold closed till water pump produces 7-10 PSI, pneumatic closed.

19.6.2 Fan sprays – Four each with 2 piece fan heads with splash plates for water spray angle and volume adjustment. Locations: one each left, right side of the rear tank head, one each left and right side of the front bumper.

19.6.3 Side sprays – One (1) each, 20 degree flusher nozzles with 3-planes of adjustment. Location shall be on the left side of the tank between the rear drivers and the cab of the chassis. Both side spray assemblies are to be electrical actuated from the cab, 45 degrees of movement above and below the horizon, 90 degrees of total travel.

19.6.4 Water Valves – The 3"x2½" universal water valves that control the above individual flushing assemblies shall have stainless steel valve seals and vulcanized neoprene faced valve heads. (Reference Diamond Built model UV3-NOP or equivalent)

19.6.5 Hose reel – Electric rewind hose reel with 100' of 1¼" general-purpose hose and adjustable fog stream nozzle. Location: right side of tank between the rear drivers and the cab.

19.6.6 Pressure outlet – Three 2½" NST pressure outlet located on right and lift side between front head of tank and rear fender, and one located on, or below the front bumper not to impact the front mounted monitor. A 2½" brass ball valve with a 2½" NST & 1½" brass valve fittings with brass cap and chain shall be installed on each outlet. Customers will specify the location.

19.6.7 Gravity fan spray - 8" x 180-degree dump fan spray with adjustable slip collar. Location: at bottom rear of tank behind rear drivers.

19.7 LOADING SYSTEM:

19.7.1 Hydrant fill – 2½" anti-siphon with 2½" NPTM thread located at the right rear corner of the water tank. 8" diameter tank inlet to have a counter balance anti-splash-swing checks plate.

19.7.2 Draft loading of water tank through water pump by means of the cab controlled pneumatic operated suction loading valve; eight (8) bolt, flange mounted quarter turn butterfly valves, one (1) 4" valve and one (1) 3" valve; one 30' suction hose with aluminum cam and groove connections and one hose-end strainer. A 3" foot valve, 300 gallon priming reservoir system with appropriate valving shall be installed. An electrically driven, positive displacement, oil-less, rotary vane, primer pump maybe supplied in lieu of the 300 gallon priming reservoir.

19.7.3 Loading hose to be transported via hose 8 J-Brackets, located on both sides of the tank above the fenders.

19.8 AIR CONTROL SYSTEM:

19.8.1 Operation – Diaphragm in the water valves, actuated by the truck brake system air pressure, through individual cab mounted control valves and ¼" air tubing to each individual water valve. Application of air by the control valve allows the spring and diaphragm to close the spray valve instantly.

19.8.2 Brake air pressure protection – Air pressure protection valve installed on the truck brake air reservoir tank (preset at 70 PSI cutoff pressure) to prevent truck brake loss in case of water system air control failure.

19.9 MASTER CONTROL CONSOLE:

19.9.1 Construction and location – Master control console located to the right of the driver's seat in the truck cab. Mounting height shall not be lower than the driver's seat. Console lid is to be removable for easy service and maintenance of console components.

19.9.2 Controls- Master console to include the following:

- o System "power" indicator
- o Master spray switch
- o Water pump "speed control" using an electrical proportional control valve
- o Water "pressure" gauge (fluid filled, 0 – 160 PSI)
- o Gravity dump valve – on/off
- o Water pressure "regulator"
- o Hose reel and pressure off control switch
- o Six individual water "spray on/off" and one "loading on/off" control switch, with aluminum switch cover plates engraved to indicate the valve location, i.e. LEFT REAR, RIGHT REAR, LEFT SIDE, RIGHT SIDE, LEFT FRONT, RIGHT FRONT.
- o Actuator control switch for Left and Right side sprays.
- o Monitor – Control console with joystick control Separate from main console with 12' pigtail for easy operation out side cab.

20. MISCELLANEOUS:

20.1 Fenders – Stainless Steel, straight 45 degree sloping tandem, box type of 12 gauge steel with 5" rub rails, front and rear mud flaps. As an alternative, 3/4-length stainless steel fenders with front and rear mud flaps can be provided.

20.2 An 18" X 18" X 24" deep stainless tool box to be mounted on the right side of the truck chassis.

20.3 Six Halogen powered adjustable work lights, all to be mounted on top of water tank, two forward mounted, two middle mounted and two rear mounted.

20.4 Lighting – Shall conform to FMVSS #180. Clearance and side marker laps shall be rubber mounted in fender sockets. Three

identification lamps shall be mounted at rear top center of water tank. An amber light shall be provided in front and rear of tank. Wiring shall be in conduit and loom.

20.5 Low point drain valves to be installed in all water plumbing and in water pump.

20.6 Testing – Water tank to be static air pressure tested at 4 PSI. Hydraulic, water plumbing, spraying and loading systems to be performance tested at maximum design operating pressures.

20.7 Tank exterior – painted white or 2B Stainless Steel Finish.

20.8 Tank interior – Stainless finish, no coating required

20.9 Monitor – 2" inlet, 2" discharge, adjustable fog-stream nozzle 350 GPM, 12-VDC electrically actuated from the cab of the truck, and with remote operation capabilities with vertical travel of 150 degrees horizontal travel of 180 degrees or 334 degrees. On/Off to be fire rated electronically actuated 2" ball valve. Control shall be joy stick

20.10 Bumper rear – 8" x 8.5"x 95" structural steel channel, bumper mounted to rear frame rails with two tow hooks. Rear cross-member and 40 ton air pintle hitch mounted. The rear cross-member shall have two ½" d-rings and a glad hand for service and emergency air. As an alternative, in lieu of the 8" x 8.5" x 95" structural steel channel, a 4" x 4" x 95" Carbon Steel Tube style bumper may be supplied.

20.11 Service manual – One-operation, maintenance and parts manuals covering all truck body equipment shall be provided at the time of delivery.

20.12 The following equipment shall be furnished and installed:

- Standard front bumper (If available, a straight bumper shall be furnished).
- Tow Hooks or pins mounted on the front for towing the vehicle empty.
- Lug wrench and handle, 30 inches long (reference Bud or equivalent).

21. PAINT:

The cab, hood, and fenders (and tank if not supplied with a 2B stainless steel finish) shall be finish coated with the manufacturers' standard lead-

free paint, white in color. The finish coat shall be free from runs, drips, sags, etc., and shall be evenly applied to provide a gloss finish. Other components may be finished according to the factory standard finish.

22. **NOISE:**

Noise emitted by each unit delivered in compliance with these specifications shall comply with all California and Federal laws or regulations pertaining to maximum allowable emission of noise, both inside and outside the operator's cab, at the time of delivery of the unit.

Units delivered will be sample tested by State personnel for noise level and must meet the noise requirements before the unit will be accepted.

ADMINISTRATIVE REQUIREMENTS

1. **VEHICLE REGISTRATION DOCUMENTS REQUIRED:** The original dealer's "Report of Sale" shall be furnished by all licensed dealers at the time of delivery of the unit covered by these specifications.

A California certification of compliance for vehicle pollution must be supplied at the time of delivery of this unit.

An original weight certificate from a California certified Weigh Master for registration purposes must be supplied at the time of delivery of this unit.

A Federal Excise Tax Exempt Certificate will be attached to the purchase order.

All documentation supplied for registration shall contain the following physical and post office box addresses:

State Department of Water Resources
416 9th Street
Sacramento, CA 95814

State Department of Water Resources
P. O. Box 942836
Sacramento, CA 94236-0001

All required documentation shall be sent to one of the above addresses by the time of delivery.

Note: The State shall register/license all vehicles with the California Department of Motor Vehicles.

2. **WORKMANSHIP:** The equipment and any accessories shall be a product of good workmanship and shall be free from any defects that will affect their appearance or serviceability.

3. **OPERATOR'S AND LUBE INSTRUCTIONS:** One set of standard operator's and lubrication instructions shall be supplied with each unit.

4. **SAFETY:** The entire unit and accessories shall comply to the applicable provisions of the California Vehicle Code, the Safety Orders of the Division of Industrial Relations, and all Federal regulations in effect at the time of manufacture.

5. **WARRANTY:** The truck cab and chassis, including but not limited to the engine, drive train, suspension, electrical system, all modifications made to the unit prior to delivery, and any optional accessory, shall be free from defects in workmanship and materials and be covered (parts and labor) under warranty for one (1) year or 12,000 miles, whichever occurs first, following the date the State puts the unit into service. The Department will notify the supplier by mail of the in-service date and keep a record of the in-service date.

   A copy of the manufacturer's standard warranty for the unit, any accessory, optional equipment, and components shall be supplied with each unit at delivery, or upon request by the State. The manufacturer will be held responsible for warranty (commencing from the date the Department puts the unit into service) for the following circumstances:

   - The manufacturer's standard warranty exceeds one (1) year or 12,000 miles, whichever comes first.
     - Under this circumstance, the supplier is responsible until one (1) year or 12,000 miles, which ever comes first, is reached. The manufacturer will be held responsible for the balance of the manufacture's standard warranty.
   - The supplier is no longer an authorized dealer of the equipment supplied.
     - Under this circumstance, the manufacturer will be held responsible for the balance of the manufacturer's standard warranty. The manufacturer shall establish a fully operational warranty service provider with capabilities equal to or exceeding the supplier's (or his designated warranty provider) within 45 days of the supplier's authorized dealer termination.

6. **IN-PROCESS REVIEW:** The unit will require an in-process review to verify timely progress of construction of the unit and to ascertain compliance with intent of the specifications and drawings. If there are any questions regarding the intent of the specifications or drawings, call the "Agency Contact" as indicated on the purchase order title page. Any in-process review will be at State expense conducted within the State of California only and will not constitute acceptance of the unit.

7. **INSPECTION:** This order will require a two (2) phase inspection process. For all inspections, the unit will be serviced, washed and ready for, as applicable, inspection or delivery. Inspections will begin within five (5) working days from the date of the inspection request by the supplier. It is the supplier's responsibility to contact the Transportation Office for inspection at (916) 653-9051.

7.1 **FIRST PHASE (PRE-DELIVERY INSPECTION):** In accordance with the State Administrative Manual, Section 4112, the unit will be inspected prior to shipment to the destination on the purchase order. This inspection trip shall be State financed at no cost to the supplier.

The unit shall be identified with the applicable Purchase Order Number. If corrections are needed as a result of the inspection, the corrections shall be made prior to shipment to the purchase order destination. Authorization to deliver the unit must be granted by the Department of Water Resources, Division of Management Services, Transportation Office.

7.2 **PRE-DELIVERY INSPECTION LOCATION:** The inspection shall be conducted by the Department of Water Resources, Division of Management Services, Transportation Office. These inspections shall take place at an adequate site provided by the vendor within the State of California. The inspection site shall meet all of the following criteria:

- The site shall not be the purchase order delivery destination.
- The site shall be paved, secure and zoned for commercial use.
- The site shall include electricity, lights, water, and compressed air.
- The facilities shall also include lift equipment adequate to raise the unit and support it on safety stands with a minimum of 12 inches of tire clearance.
- The supplier shall provide conditions which meet the safety standards of CAL-OSHA and title 8 of the California Code of Regulation.
- The adequacy of the sire shall be determined by the Department of Water Resources, Division of Management Services, Transportation Office. Contact the Senior Inspector of Automotive Equipment at (916) 653-9051.
- If the facility is deemed unacceptable by the Department of Water Resources, Division of Management Services, Transportation Office, the vendor shall be billed for the inspection trip including wages and

expenses. The cost shall be deducted from the purchase order payment.

7.3 **SECOND PHASE (FINAL INSPECTION):** The unit will have a final inspection at its delivery destination shown on the purchase order to verify acceptability. The State will have five (5) working days after delivery of the unit to conduct the final inspection of said unit. A unit delivered to the final purchase order destination will be accepted only when all purchase order requirements have been met, any damages have been corrected, and all required documents are received by the Department of Water Resources, Division of Management Services, Transportation Office. These documents include, as applicable, the invoice, vehicle registration documents, parts book, operators manual, service manuals, lubrication instructions and charts, warranty information, certifications, and questionnaires. A unit which is not accepted by the delivery date on the purchase order will be considered delivered late.

If the supplier receives notice that the unit is not acceptable, whether written or oral, the unit shipped to the purchase order destination shall be removed within seven (7) calendar days. If the supplier fails to remove said unit from the State's facilities within the specified period, the State may forward said unit to the supplier by common carrier at the supplier's expense and risk.

8. **DELIVERY:** Inspection, delivery, and final acceptance of all units on the Purchase Order shall be within 240 calendar days after the Purchase Order date. Contact the Department of Water Resources, Division of Management Services, Transportation Office at (916) 653-9051 for delivery. The final delivery destination will be the Department of Water Resources' Corporation yard, located at:

4300 West Capitol Ave
West Sacramento, CA 95691

Failure of any units to comply with the specifications by the final delivery date may place the supplier in default and may be grounds for the State to invoke Paragraph 26 of the General Provisions, Rights and Remedies of the State for Default. The Department of General Services, Procurement Division will be notified at such time.

Acceptance of delivery or placement in operation of any equipment shall not release the manufacturer from liability for faulty design, workmanship, or materials appearing, even after final payment has been made.

8.1 **LATE DELIVERY CHARGES:** The parties to this agreement acknowledge that the State shall incur actual damages should the supplier

fail to perform the work as called out in the contract and specification on the dates set forth herein. The parties, therefore, have agreed to late delivery charges in the amount of $75.00 per unit per work day.

Workdays are Monday through Friday inclusive, except State holidays observed Monday through Friday inclusive.

The parties also agree that the amount specified is not unreasonable nor punitive in nature because both parties have carefully considered the amount specified and believe it to be a reasonable estimate, and not excessive at the time the purchase order is entered into.

It is, therefore agreed, that the supplier will pay the State of California the sum of $75.00 per unit per work day (as stated above) for each work day the work remains uncompleted or unaccepted by the State, provided the total late delivery charges assessed against supplier shall in no event exceed twenty-five percent (25%) of the total value of the entire order, and the supplier agrees to pay said damages as herein provided. In the event such damages are not paid, the supplier agrees that the State may deduct the amount thereof from any monies due or that may become due said supplier.

9. **PAYMENT:** Process for payment will be initiated when the unit is received and deemed acceptable. The discount period will start after acceptance of the unit on the purchase order.

10. **QUESTIONNAIRE:** The attached questionnaire shall be filled out and will become a part of each bid submitted. Any portion of the questionnaire which is not applicable to the equipment shall be shown as N/A (not applicable). Failure to submit a completed questionnaire may result in rejection of your bid.

Unless otherwise stated in the purchase order, the requirements of the written purchase order specification shall have precedence over the completed questionnaire; and the completed questionnaire shall have precedence over standard factory specifications or literature.

11. **GENERAL:** One (1) complete set of filters (air, oil, water, fuel, and hydraulic) shall be supplied with the unit delivered. This set of filters shall be as recommended by the manufacturer and shall be complete with the appropriate part numbers for identification.

Each unit and any accessory shall be delivered completely assembled and ready to operate.

No exceptions to the specifications will be allowed unless the exceptions are listed on the purchase order or subsequent addenda.

The component parts of the unit shall be new and of proper size and design to safely withstand the maximum stresses imposed.

The manufacturer's torque rating of each driven part shall be equal to or exceed the torque rating of its driving member.

Complete printed specifications, published literature, and photos or illustrations of the unit that the bidder proposes to furnish shall be supplied upon request.

All equipment and accessories cataloged as standard, unless superseded by these specifications, are to be furnished and included in purchase price of this unit.

Bids will be considered only on equipment represented by a supplier capable of providing adequate repair parts, warranty, technical assistance, and training in California as of the bid opening date. The supplier shall be capable of supplying repair parts to the Department within five (5) working days after a purchase order for parts is submitted to the supplier, whether by phone, fax, or mail. Bidders may be required to provide documentation supporting this requirement prior to award of the contract.

Suppliers shall be the equipment manufacturer, an authorized factory dealer or representative thereof, or shall have authorization from the equipment manufacturer or authorized factory dealer to solicit the equipment bid. The bidder shall be capable of providing parts, service, warranty, and training for the equipment bid as specified herein. If the bidder cannot provide these items for the equipment bid, the equipment manufacturer or an authorized factory dealer may provide these items for the bidder. Upon request, the signed agreement between the bidder and the equipment manufacturer or authorized factory dealer, stating who will be responsible for providing parts, service, warranty, and training for the equipment bid, shall be provided to the State.

Bids will not be considered if supplier's designated f.o.b. delivery destination is other than the delivery address stated in the invitation to bid.

Only new models in current production, which are cataloged by the manufacturer and for which manufacturer's published literature and printed specifications are currently available, will be considered. Special options may be included only when recommended by the manufacturer of the unit and approved by the State.

All equipment is to be factory installed. If the equipment/options are not available factory installed, dealer installed equipment/options may be acceptable. The bidder is to specify those items which will be dealer installed.

The State reserves the right to amend the contract, up to 10% of the Purchase Order amount, to cover deficiencies or inconsistencies within or between the drawings and the technical specifications. These amendments shall cover the cost of any materials involved, and/or the standard shop labor rate for modification or installation.

The State reserves the right to purchase a minimum of one (1) additional unit at bid prices, for State Agencies and California Local Government Agencies. Orders for such additional units shall be placed within 120 days of bid award.

12. **CHANGE ORDERS:** This contract may be amended, modified or terminated at any time by mutual agreement of the parties. Change orders amending, modifying, or terminating the contract including any modification of the compensation payable, may be issued only by the State Procurement Officer and shall be in writing. Termination, as that term is used in this section, does not include termination for default of the supplier.

QUESTIONNAIRE FOR DIESEL TRUCK CAB AND CHASSIS (with Tank)

NOTE: This questionnaire shall become part of this bid and take precedence over any accompanying literature. The bidder must complete the following in full.

Make International

Model 7600 w/ DIAMOND STEEL WATER TANK

1. **Capacity:**
   - Manufacturer GVWR 66,000 lbs.
   - Manufacturer GCWR 80,000 lbs.
   - Total Curb Weight Approx. 26,435 (with tank), 19,235 (CAB & CHASSIS)

2. **Wheelbase:**
   - Wheelbase 211 In.
   - Cab to Axle 143.09 In.
   - Back of Cab to Rear of Frame 228.9 In.

3. **Engine:**
   - Make Cummins
   - Model ISM
   - Displacement 661 Cu in.
   - Gross HP 410 HP @ 2100 RPM
   - Gross Torque 1550 @ 1200 RPM

4. **Frame:**
   - Minimum RBM 3,580,800 Lbs. In./Rail
   - Minimum RBM at Engine Notch 2,506,560 Lbs. In./Rail
   - Section Modulus 29.84 In^3
   - Yield Strength 120,000 PSI

5. **Transmission – Specification:**
   - Manufacturer Allison
   - Model 4500 RDS P
   - Lubricant change interval 24 mos/50,000 for Severe Duty months/miles

6. **Cooling System:**
   - Coolant w/ 100,000 mile (min.) warranty **or** filter and conditioner? YES
   - Coolant product name Rec Shell Rotella Extended Life Coolant
   - Coolant change interval 600,000 miles on ROAD OR 12,000 hours OFF ROAD w/ Shell Rotella ELC Extender at 300,000 or 6,000 hours. months/miles

7. **Exhaust:**
   Number of Mufflers 1
   Vertical or Horizontal HORIZONTAL
   Number of Stacks 1
   Vertical or Horizontal VERTICAL

8. **Front Axle:**
   Make/Model DANA SPICER I-200W
   Manufacturer Rating 20,000 Lbs.
   Set-Back? (Yes/No) YES Distance 39.9 In.
   GAWR 20,000 Lbs.
   Hubs filled with synthetic gear lubricant? (y/n) YES
   Lubricant product name EMGARD 50W
   Lubricant change interval 500,000 ~~months~~/miles
   Increased product warranty w/ syn. Lube? (y/n) NO months/miles

9. **Rear Axle:**
   Make/Model DANA SPICER D46-170D/R46-170D
   Mfg Rating 46,000 Lbs.
   Ratio 5.57 Single or Two Speed SINGLE
   Electronic Traction Control? (Yes/No) YES
   Both Axles? (Yes/No) YES
   GAWR 46,000 Lbs.
   Differentials filled with synthetic gear lubricant? (y/n) YES
   Lubricant product name EMGARD 75W-90
   Lubricant change interval 500,000 months/miles
   Increased product warranty w/ syn. Lube? (y/n) NO months/miles

8. **Rear Suspension:**
   Spring Type:
   Make/Model HENDRICKSON RT-463
   Capacity at ground 46,000

11. **Air Brakes:**
   Type (S-cam?) MERITOR S-CAM

12. **Wheels:**

	Front	Rear
Rim Size	22.5	22.5

13. **Tires:**

	Front	Rear
Size/Load Range	425/65R22.5 (L)	11R22.5 (H)
Manufacturer/Model	Continental HTC	Continental HDL

NOTE: THIS QUESTIONNAIRE SHALL BECOME PART OF THIS BID AND TAKE PRECEDENT OVER ACCOMPANYING LITERATURE. THE BIDDER MUST COMPLETE THE FOLLOWING IN FULL.

Riverview International Trucks, LLC
Company

Jason Farrell
Signature

2445 Evergreen Ave.
Street Address

Jason Farrell - Fleet Account Mgr.
Name and Title

W. Sacramento, CA 95691
City, State, Zip Code

(916) 669-0853
Telephone Number

LIST ANY ADDITIONAL INFORMATION OR EXCEPTIONS TO THE SPECIFICATIONS BELOW